## Specifications for Current Instrument Transformer 7J11 Warehouse Stock J611587

The contractor shall provide a current instrument transformer (CT), 34.5-kV class, single phase, outdoor, wound type, molded dry-type (oilfree), suitable for metering and protective relaying applications, which shall meet, or exceed, the following requirements:

- 1. Outdoor, wound, dry type (oil-free), polyurethane resin and/or butyl-rubber molded.
- 2. Meet the requirements of IEEE Standard C57.13-1993(R2003) or later.
- 3. Equal to, or better than:

ABB KOR-20, Style Number 7524A21G08;

GE JKW-7 Current Transformer, Product number 757X050025;

Ritz GIFS 36-55, Catalog Number: 113026055 45944;

NOTE: In the event the manufacturer's specifications conflict with the requirements of these specifications, the requirements of the specifications shall prevail.

- 4. Nominal System Voltage: 34,500 Volts Line to Line (L-L), grounded WYE/20125 Volts Line to Neutral (L-N) .
- 5. BIL: 200-kV or higher.
- 6. Rated Operating Frequency: 60 Hz.
- 7. Ratios: 300/150:5A (60/30:1):
  - a. Primary Current Rating: 300/150 Amperes; and
  - b. Secondary Current Rating: 5 Amperes.
- 8. Continuous thermal rating factor at 30°C:
  - a. 3.0 at Tap; and
  - b. 2.0 Full.
- 9. ANSI Accuracy Class
  - a. Metering:
    - (1) 0.3% at B0.1 through B0.5, and
    - (2) 0.6% at B0.9.
  - b. Relaying:

- (1) C200 Full, and
- (2) C100 Tap.
- 10. Thermal Rating: 100 x Normal for 1 second, all ratings.
- 11. Grounding connection shall be provided for tank.
- 12. Four bolt (or more) attachment plate shall be an integral part of the transformer.
- 13. Shall not exceed 30 inches installed height from bottom of base to top-most point of unit.
- 14. Suitable for storage and operation in ambient temperatures ranging from  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) to  $+40^{\circ}\text{C}$  ( $114^{\circ}\text{F}$ ).
- 15. A nameplate for the CT shall be permanently affixed to the unit and shall meet or exceed the following requirements:
  - a. Be engraved stainless steel or aluminum;
  - b. Be engraved with sufficient information to certify the CT meets the requirements of these specifications;
  - c. Show the manufacturer's name, model, catalog, and part numbers of the CT;
  - d. Show the manufacturer's serial number of the CT;
  - e. Show the month and year the CT was manufactured;
  - f. Show the weight of the CT;
  - g. Show the manufacturer's maximum recommended operational altitude;
  - h. Show the manufacturer's maximum and minimum recommended temperatures for storage and operation; and
  - j. Present an engraved schematic connection diagram showing connections H1, H2, X1, X2, and X3.
- 16. The instrument transformer and all components shall be new and unused. The equipment shall be furnished with a certification of date of manufacture. Equipment manufactured more than 2 years prior to bid opening date will not be accepted by the Government.
- 17. Drawings and Data:
  - a. Proposal The Bidder shall provide manufacturer's documentation in sufficient detail in the bid proposal to allow the

Government to verify all specification requirements are met, or exceeded, by the equipment proposed; and

- b. Each CT shall be furnished with manufacturer's drawings and data consisting, as a minimum, of the following;
  - (1) Scaled plan and profile drawing with dimensions,
  - (2) High voltage terminal and grounding pad details drawn to scale and dimensioned,
  - (3) Nameplate drawing,
  - (4) Schematic and connection or wiring diagram,
  - (5) The installation, operation, and maintenance manual, and
  - (6) A complete set of the manufacturer's equipment specifications in sufficient detail to allow the Government to verify the equipment meets, or exceeds, all specification requirements.